

Message Text

LIMITED OFFICIAL USE

PAGE 01 STATE 277328

70

ORIGIN EUR-12

INFO OCT-01 ISO-00 RSC-01 /014 R

66612

DRAFTED BY:EUR/RPM:DTELLEEN

APPROVED BY:EUR/RPM:DTELLEEN

----- 106540

R 182232Z DEC 74

FM SECSTATE WASHDC

TO AMEMBASSY PARIS

LIMITED OFFICIAL USE STATE 277328

FOLLOWING REPEAT OTTAWA 3989 SENT ACTION SECSTATE DATED
6 DECEMBER 1974:

QTE

LIMITED OFFICIAL USE OTTAWA 3989

E.O. 11652: N/A

TAGS: SENV, TBIO

SUBJ: HEALTH EFFECTS OF PVC PACKAGING

REF: STATE 263361

1. EMBOFF DISCUSSED STATUS OF CANADIAN INVESTIGATIONS
OF HEALTH HAZARDS INVOLVED IN POLYVINYL CHLORIDE (PVC),
AND VINYL CHLORIDE MONOMER (VC.) WITH DR. HAROLD GRICE,
DIRECTOR FOOD RESEARCH LABORATORIES, HEALTH PROTECTION
BRANCH, DEPT OF HEALTH AND WELFARE, AND RS. WITHY
AND WILLIAMS OF HIS STAFF.

2. IT SHOULD BE NOTED THAT CANADIANS WORK CLOSELY WITH
US COUNTERPARTS, PARTICULARLY FDA, AND BASE MUCH OF
THEIR RESEARCH ON U.S. LEADS. FOLLOWING MAY 1973
ANNOUNCEMENT BY U.S. FDA OF PROPOSAL TO BAN PACKAGING
ALCOHOLIC BEVERAGE IN PVC CONTAINERS, CANADIANS BEGAN
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 STATE 277328

OWN INVESTIGATION OF PVC PACKAGED FOODS TO ASCERTAIN

LEVELS OF VCM. ANALYSES PRODUCED FOLLOWING FINDINGS:

PPM VCM	
BEEFEATER GIN	UP TO 0.48
BEEFEATER GIN (GLASS BOTTLE).	UP TO 0
BEEFEATER MARTINI	UP TO 1.7
PIAT DE BEAUJOLAIS	UP TO 0.85
LONDON SUPREME SHERRY	UP TO 1.0
HEINZ MALT VINEGAR	UP TO 1.5
HEINZ APPLE CIDER VINEGAR	UP TO 8.4
PLANTER'S PEANUT OIL	UP TO 3.3
LOW CALORIA SALAD DRESSINGS	UP TO 2.0

THE FOOD COMPANIES INVOLVED WERE ADVISED OF THE HEALTH PROTECTION BRANCH'S CONCERN OVER THESE FINDINGS, AS WERE MANUFACTURERS SUPPLYING SUCH CONTAINERS TO THE FOOD INDUSTRY.

3. HEALTH PROTECTION BRANCH JUST COMPLETED STUDY ON BLOOD LEVELS IN RATS FOLLOWING EXPOSURE TO VC VAPOR AND ACUTE ORAL DOSE. TENTATIVE FINDINGS FOLLOW:

A. EXPOSE OF RATS TO 1000 PPM VINYL CHLORIDE VAPOR:

--PRODUCES A PLATEAU BLOOD LEVEL OF 8 MICROGRAMS/1 VCM.
-- THIS PLATEAU IS REACHED WITHIN 20 MINUTES OF BEGINNING OF EXPOSURE.
-- A TEMPORARY DECLINE IN EXPOSURE LEVEL (FROM 1000 PPM TO 800 PPM) PRODUCED AN ALMOST INSTANTANEOUS, PROPORTIONED DROP IN THE BLOOD LEVEL FROM 8 IMCROGRAMS/1 TO 6 MICROGRAMS/1. NEED MORE EXPERIMENTS TO BE SURE IF THIS PROPROTIONAL DIRECT RELATIONSHIP IS TRUE, BUT MOST IMPORTAN IF IT IS.

- WHEN ANIMALS REMOVED FROM VAPOR, BLOOD LEVELS DROPPED TO VIRTUALLY ZERO WITHIN 30 MINUTES.

B. ORAL EXPOSURE DATA:

- PEAK BLOOD LEVEL REACHED IN ABOUT 6 MINUTES.
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 STATE 277328

- PEAK BLOOD LEVEL - 6 MICROGRAMS/M1 WHEN 500 GRAM RATE DOSED WITH A SINGLE DOSE OF 24.15 MGMS IN 100 ML WATER.
- THE HALF-LIFE OF VCM RETENTION IN BLOOD AFTER DOSAGE IS ABOUT 17.5 MINUTES.
- THIS IS MUCH LONGER THAN PREVIOUS HALF-LIFE (ABOUT 6 MINUTES) BUT THESE RATS ARE MUCH OLDER AND HEAVIER.

- REASON FOR DIFFERENCES IN RETENTION IS THE AGE AND WEIGHT OF RATS COULD BE: (1) OLDER RATS HAVE MORE FATTY TISSUE. WE DO NOT YET HAVE DATA ON THE AMOUNT OF VCM SEQUESTERED IN TISSUES, SO IT IS POSSIBLE THAT VCM COULD BE RETAINED IN THIS SURPLUS FAT. (2) DOW CHEMICAL WORKERS HAVE SHOWN THAT THERE IS A DIFFERENCE IN METABOLISM AS RATS AGE. (NOTE THESE DIFFERENCES MAY NOT NECESSARILY INVOLVE THE SAME TYPE OF RESPONSE AS IN MAN SINCE RATS NEVER STOP GROWTH ENTIRELY).

- THE HPB GROUP PLAN TO STUDY MICROSOMAL ENZYMES STUDIED BY THE DOW GROUP, IN THE PRESENCE OF GENERAL METABOLISM, AND SPECIFIC ENZYME, INHIBITORS AND STIMULANTS, TO SEE WHETHER THESE METABOLIC CHANGES RELATE DIRECTLY TO CHANGES IN RETENTION OF VC.

C. FURTHER NOTE ON SO CALLED MEAT WRAPPERS SYNDROME

- DI-(2-ETHYL HEXYL) ADIPATE - AN ADDITIVE IN PVC PLASTIC ITEMS

- MAY BE RESPONSIBLE FOR SYMPTOMS OBSERVED.

D. BURNING OF PLASTIC (PVC) GARBAGE ITEMS

- BURNING DOES NOT DEPOLYMERIZE PVC (IT DOES NOT YIELD VCM VAPOR)

- PRODUCTS OF BURNING ARE: - HCL, CO, AND TRACES OF PHOSGENE (COCL₂). THIS WORK WAS DONE BY DIVISION OF BUILDING RESEARCH, NATIONAL RESEARCH COUNCIL OF CANADA.

4. BACKGROUND PAPER PREPARED BY CANADIANS FOR DISCUSSION WITH EMBOFF AND CHARTS ON BLOOD LEVEL LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 04 STATE 277328

FINDINGS AFTER EXPOSURE TO VC BEING POUCHES TO EUR/CAN. GOC OFFICIALS REQUESTED THAT ABOVE FINDINGS AND DATA NOT BE MADE PUBLIC. JOHNSON UNQTE KISSINGER

LIMITED OFFICIAL USE

NNN

Message Attributes

Automatic Decaptioning: X
Capture Date: 01 JAN 1994
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: FOOD & DRUG REGULATIONS, CHLORINE, CHEMICALS
Control Number: n/a
Copy: SINGLE
Draft Date: 18 DEC 1974
Decaption Date: 01 JAN 1960
Decaption Note:
Disposition Action: RELEASED
Disposition Approved on Date:
Disposition Authority: garlanwa
Disposition Case Number: n/a
Disposition Comment: 25 YEAR REVIEW
Disposition Date: 28 MAY 2004
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1974STATE277328
Document Source: CORE
Document Unique ID: 00
Drafter: EUR/RPM:DTELLEEN
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Film Number: D740368-1124
From: STATE
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1974/newtext/t19741224/aaaaauqu.tel
Line Count: 157
Locator: TEXT ON-LINE, ON MICROFILM
Office: ORIGIN EUR
Original Classification: LIMITED OFFICIAL USE
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 3
Previous Channel Indicators:
Previous Classification: LIMITED OFFICIAL USE
Previous Handling Restrictions: n/a
Reference: 74 STATE 263361
Review Action: RELEASED, APPROVED
Review Authority: garlanwa
Review Comment: n/a
Review Content Flags:
Review Date: 16 APR 2002
Review Event:
Review Exemptions: n/a
Review History: RELEASED <16 APR 2002 by boyleja>; APPROVED <23-Aug-2002 by garlanwa>
Review Markings:

Declassified/Released
US Department of State
EO Systematic Review
30 JUN 2005

Review Media Identifier:
Review Referrals: n/a
Review Release Date: n/a
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
Secure: OPEN
Status: NATIVE
Subject: HEALTH EFFECTS OF PVC PACKAGING
TAGS: SENV, TBIO
To: PARIS
Type: TE
Markings: Declassified/Released US Department of State EO Systematic Review 30 JUN 2005